

Product datasheet for **TL302566**

PDF Human shRNA Plasmid Kit (Locus ID 64146)

Product data:

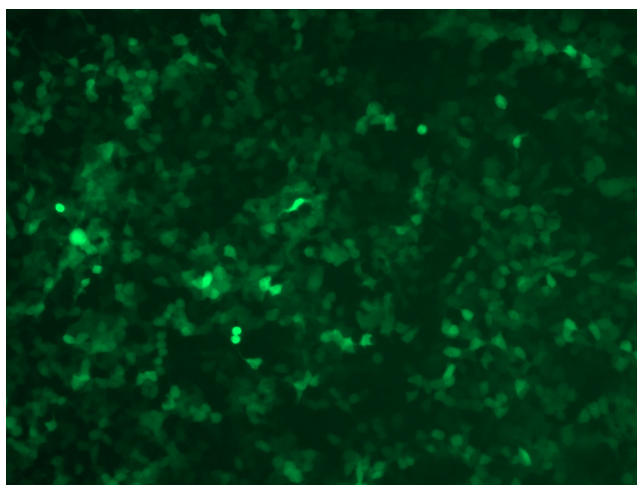
Product Type:	shRNA Plasmids
Product Name:	PDF Human shRNA Plasmid Kit (Locus ID 64146)
Locus ID:	64146
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	PDF - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 64146). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<u>NM_022341</u> , <u>NM_022341.1</u> , <u>BC019912</u> , <u>BC019912.1</u> , <u>NM_022341.2</u>
UniProt ID:	<u>Q9HBH1</u>
Summary:	Protein synthesis proceeds after formylation of methionine by methionyl-tRNA formyl transferase (FMT) and transfer of the charged initiator f-met tRNA to the ribosome. In eubacteria and eukaryotic organelles the product of this gene, peptide deformylase (PDF), removes the formyl group from the initiating methionine of nascent peptides. In eubacteria, deformylation of nascent peptides is required for subsequent cleavage of initiating methionines by methionine aminopeptidase. The discovery that a natural inhibitor of PDF, actinonin, acts as an antimicrobial agent in some bacteria has spurred intensive research into the design of bacterial-specific PDF inhibitors. In human cells, only mitochondrial proteins have N-formylation of initiating methionines. Protein inhibitors of PDF or siRNAs of PDF block the growth of cancer cell lines but have no effect on normal cell growth. In humans, PDF function may therefore be restricted to rapidly growing cells. [provided by RefSeq, Nov 2008]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .


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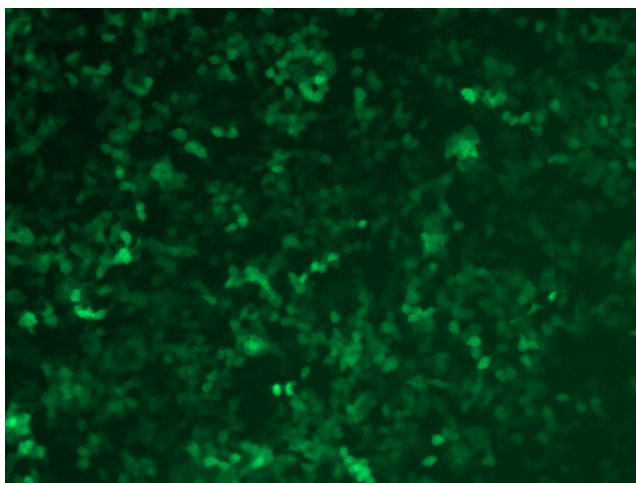
**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

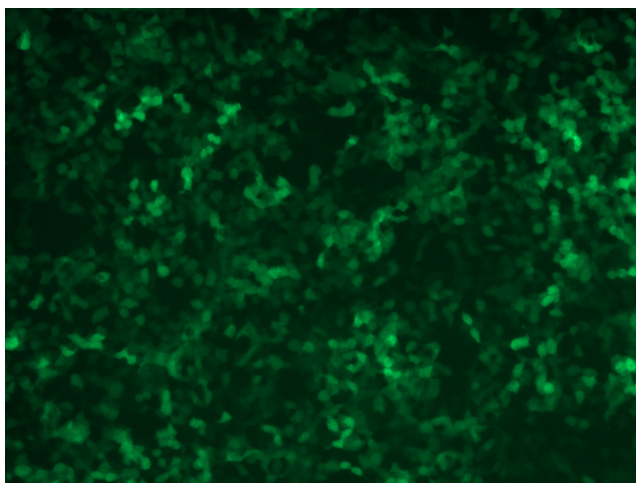
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

Product images:


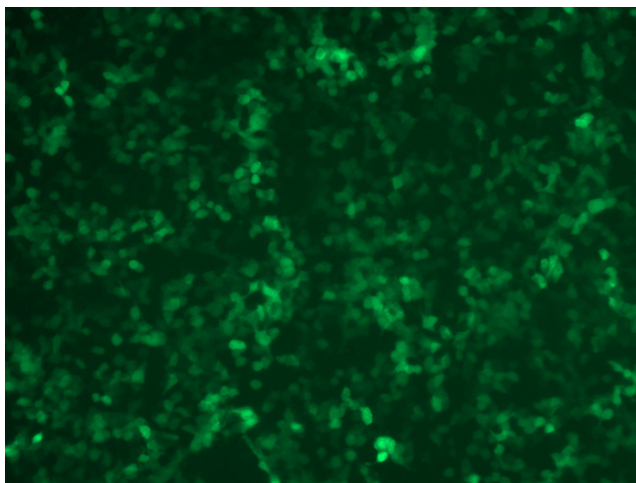
GFP signal was observed under microscope at 48 hours after transduction of TL302566A virus into HEK293 cells. TL302566A virus was prepared using lenti-shRNA TL302566A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL302566B virus into HEK293 cells. TL302566B virus was prepared using lenti-shRNA TL302566B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL302566C] virus into HEK293 cells. [TL302566C] virus was prepared using lenti-shRNA [TL302566C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL302566D] virus into HEK293 cells. [TL302566D] virus was prepared using lenti-shRNA [TL302566D] and [TR30037] packaging kit.